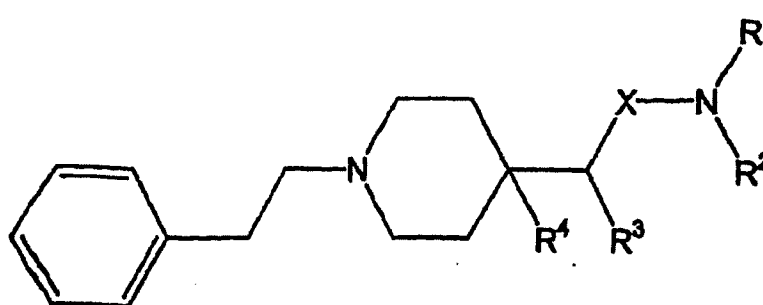


II. CLAIM AMENDMENTS

1. (Currently Amended) Substituted 1-phenethylpiperidine compounds of the general formula I



I,

in which

X denotes a methylene (CH_2) or carbonyl ($\text{C}=\text{O}$) group,

R^1 denotes an optionally at least mono-substituted aryl or heteroaryl residue,

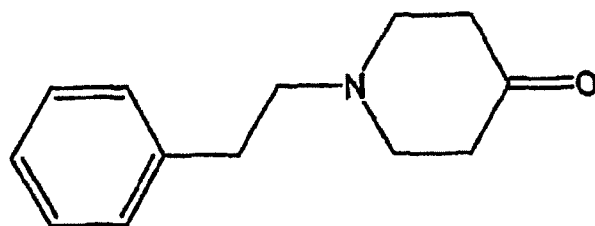
R^2 denotes H, COR^5 , SO_2R^5 , an optionally at least mono-substituted, saturated, branched or unbranched aliphatic C_{1-10} residue, an optionally at least mono-substituted, at least mono-unsaturated, branched or unbranched aliphatic C_{2-10} residue, an optionally at least mono-substituted, saturated or at least mono-unsaturated cycloaliphatic C_{3-8} residue, an optionally at least mono-substituted aryl or heteroaryl residue or an optionally at least mono-substituted aryl or heteroaryl residue attached via a C_{1-3} alkylene group, R^3 and R^4 each separately denote H or together denote a bond,

R^5 denotes an optionally at least mono-substituted, saturated, branched or unbranched aliphatic C_{1-10} residue, an optionally at least mono-substituted, at least mono-

unsaturated, branched or unbranched aliphatic C₂₋₁₀ residue, an optionally at least mono—substituted, saturated or at least mono-unsaturated cycloaliphatic C₃₋₈ residue, an optionally at least mono-substituted aryl or heteroaryl residue or an optionally at least mono—substituted aryl or heteroaryl residue attached via a C₁₋₃ alkylene group,

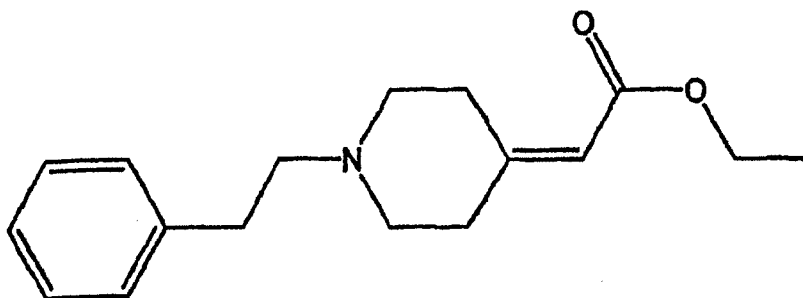
as a free base or a corresponding physiologically acceptable salt and corresponding racemates, enantiomers and diastereomers.

2. (Original) Substituted 1-phenethylpiperidine compounds according to claim 1, characterised in that X denotes a methylene (CH₂) group.
3. (Previously Presented) Substituted 1-phenethylpiperidine compounds according to claim 1, characterised in that R¹ denotes an optionally at least mono—substituted aryl residue.
4. (Previously Presented) Substituted 1-phenethylpiperidine compounds according to claim 1, characterised in that R² denotes H, COR⁵, SO₂R⁵ or denotes a C₁₋₆ alkyl residue, preferably denotes H or COR⁵.
5. (Previously Presented) Substituted 1-phenethylpiperidine compounds according to claim 1, characterised in that the residues R³ and R⁴ each denote H.
6. (Previously Presented) Substituted 1-phenethylpiperidine compounds according to claim 1, characterised in that the residue R⁵ denotes a C₁₋₆ alkyl residue or denotes an unsubstituted or at least mono-substituted aryl residue.
8. (Previously Presented) A process for the production of substituted 1-phenethylpiperidine compounds of the general formula I according to claim 1, characterised in that
 - (a) 1-phenethylpiperidin-4—one of the formula II



II

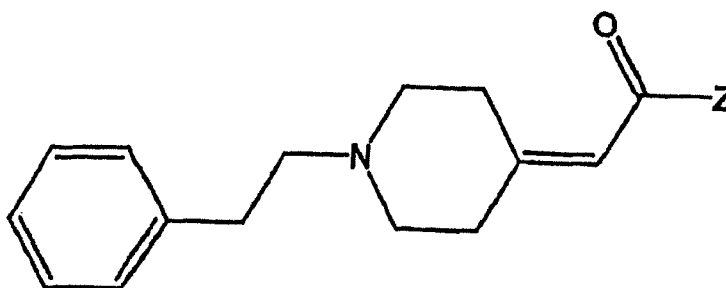
is reacted with triethyl phosphonoacetate in solution to yield (1-phenethylpiperidin-4-ylidene)-ethyl acetate of the formula III



III

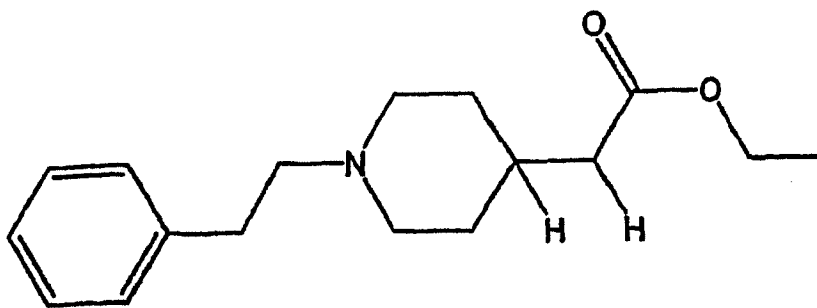
and this is optionally purified in accordance with conventional methods and/or optionally isolated in accordance with conventional methods,

(b) optionally the (1-phenethylpiperidin-4-ylidene)-ethyl acetate of the formula III is converted in accordance with conventional methods into a compound of the general formula IV,

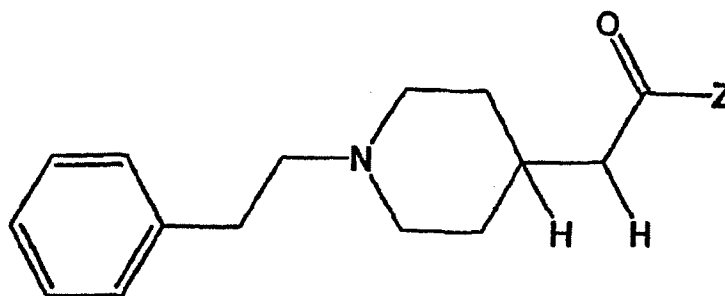
**IV**

in which Z denotes a group which activates the carbonyl carbon atom for reaction with an amine, the compound of the general formula IV thus obtained is optionally purified in accordance with conventional methods and/or optionally isolated in accordance with conventional methods,

(c) optionally at least one of the compounds of the formula III or IV in solution is reduced to yield a corresponding compound of the general formula III'

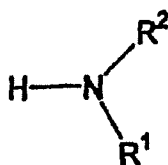
**III'**

or to yield a corresponding compound of the general formula IV'

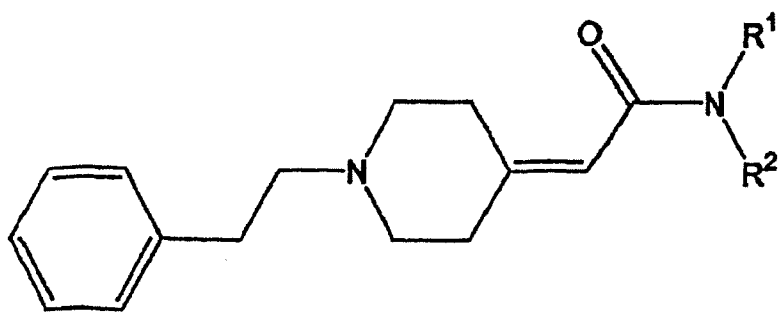
**IV'**

and the corresponding compound is optionally purified in each case in accordance with conventional methods and/or optionally isolated in each case in accordance with conventional methods,

(d) at least one compound of the formula III, III', IV and IV' in solution is reacted with a primary or secondary amine of the general formula V,

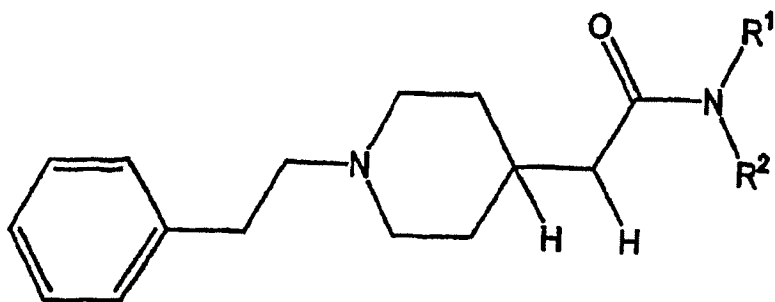
**V**

in which R¹ and R² have the meaning according to the above-stated general formula I, to yield at least one compound of the general formula Id



Id

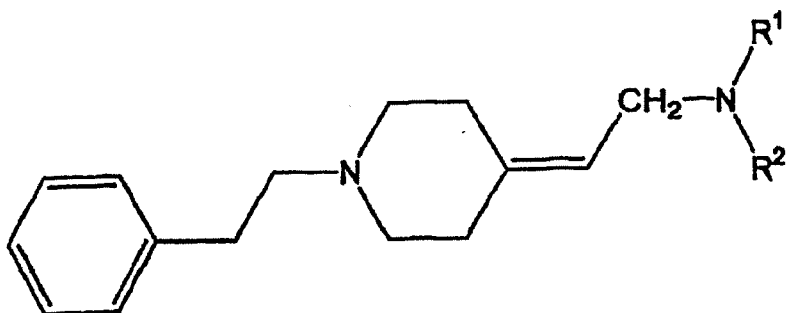
and/or at least one compound of the general formula Id'



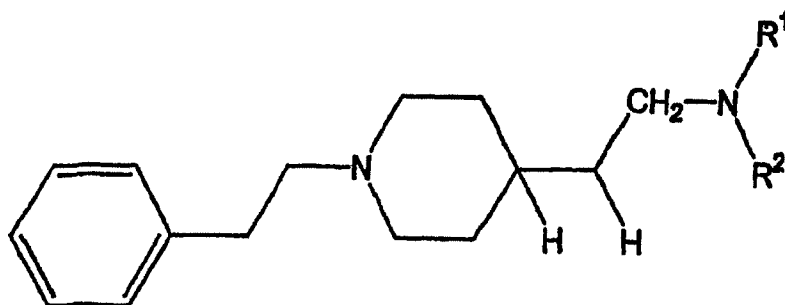
Id'

and this is optionally purified in each case in accordance with conventional methods and/or optionally isolated in each case in accordance with conventional methods,

(e) optionally at least one of the compounds of the general formula Id and/or Id' is converted by reduction in solution into at least one compound of the general formula Ie

**1e**

and/or at least one compound of the general formula 1e'

**1e'**

in which R¹ and R² each have the meaning according to claim 1, and this is optionally purified in each case in accordance with conventional methods and/or optionally isolated in each case in accordance with conventional methods,

(f) optionally at least one compound of the general formula Ie and/or Ie', in which the residue R² denotes H, is converted in accordance with conventional methods known to the person skilled in the art into at least one compound of the general formula Ie and/or Ie', in which the residue R² denotes COR⁵, SO₂R⁵, an optionally at least mono—substituted, saturated, branched or unbranched aliphatic C₁₋₁₀ residue, an optionally at least mono-substituted, at least mono—unsaturated, branched or unbranched aliphatic C₂₋₁₀ residue, an optionally at least mono-substituted, saturated or at least mono-unsaturated cycloaliphatic C₃₋₈ residue, an optionally at least mono-substituted aryl or heteroaryl residue or denotes an optionally at least mono-substituted aryl or heteroaryl residue attached via a C₁₋₃ alkylene group, wherein the residue R⁵ has the above—stated meaning and this is optionally purified in accordance with conventional methods and/or optionally isolated in accordance with conventional methods.

9. (Original) A process according to claim 8, characterised in that Z denotes OH, Cl or a succinimide residue.

10. (Previously Presented) A process according to claim 8, characterised in that the reduction to yield the compounds of formula III' or IV' is performed with hydrogen in the presence of a transition metal catalyst, preferably in the presence of palladium powder.

11. (Previously Presented) A process according to claim 8, characterised in that the reaction with a primary or secondary amine of the general formula V is performed in the presence of n—butyllithium.

12. (Previously Presented) A process according to claim 8, characterised in that reduction to yield a compound of the general formula Ie or Ie' proceeds with aluminium hydride (alane) produced in situ from lithium aluminium hydride and aluminium trichloride in an organic solvent.

13. (Previously Presented) A pharmaceutical preparation containing at least one substituted 1-phenethylpiperidine compound according to claim 1 and optionally physiologically acceptable auxiliary substances.
14. (Original) A pharmaceutical preparation according to claim 13 for combatting pain.
15. (Original) A pharmaceutical preparation according to claim 13 for the treatment of migraine.
16. (Original) A pharmaceutical preparation according to claim 13 for the treatment of diarrhoea.
17. (Original) A pharmaceutical preparation according to claim 13 for the treatment of urinary incontinence.
18. (Original) A pharmaceutical preparation according to claim 13 for the treatment of pruritus.
19. (Original) A pharmaceutical preparation according to claim 13 for the treatment of inflammatory reactions.
20. (Original) A pharmaceutical preparation according to claim 13 for the treatment of allergic reactions.
21. (Original) A pharmaceutical preparation according to claim 13 for the treatment of the abuse of alcohol and/or drugs and/or medicines.
22. (Original) A pharmaceutical preparation according to claim 13 for the treatment of dependency on alcohol and/or drugs and/or medicines.
23. (Original) A pharmaceutical preparation according to claim 13 for the treatment of inflammation.

24. (Original) A pharmaceutical preparation according to claim 13 for local anaesthesia.

25. (Currently Amended) ~~A method of Use of at least one substituted 1—phenethylpiperidine compound according to claim 1 to produce a pharmaceutical preparation for the combatting of pain, or treating for the treatment of migraine, diarrhoea, urinary incontinence, pruritus, inflammatory reactions, allergic reactions, dependency on alcohol and/or drugs and/or medicines, abuse of alcohol and/or drugs and/or medicines, inflammation or for local anesthesia comprising administering to a patient in need thereof of an effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.~~

26. (New) A compound of claim 1 selected from the group consisting of
 [2-(1-Phenethylpiperidin-4-yl)ethyl]phenylamine,
 (4-Methoxyphenyl)-[2-(1-phenethylpiperidin-4-yl)ethyl]amine,
 2-[2-(1-Phenethylpiperidin-4-yl)ethylamino]phenol,
 [2-(1-Phenethylpiperidin-4-yl)ethyl]-(3-trifluoromethylphenyl)amine,
 (3-Methoxyphenyl)-[2-(1-phenethylpiperidin-4-yl)ethyl]amine,
 4-[2-(1-Phenethylpiperidin-4-yl)ethylamino]phenol,
 (4-Chloro-2-fluorophenyl)-[2-(1-phenethylpiperidin-4-yl) ethyl]amine,
 3-[2-(1-Phenethylpiperidin-4-yl)ethylamino]phenol,
 N-(3-Chloro-4-methoxyphenyl)-N-[2-(1-phenethylpiperidin-4-yl) ethyl]acetamide,
 N-(3-Chloro-4-methoxyphenyl)-N-[2-(1-phenethylpiperidin-4-yl) ethyl]
 propionamide,
 N-(3-Chloro-4-methoxyphenyl)-N-[2-(1-phenethylpiperidin-4-yl)ethyl]benzamide,
 N-[2-(1-Phenethylpiperidin-4-yl)ethyl]-N-(3-trifluoromethylphenyl)acetamide,
 N-[2-(1-Phenethylpiperidin-4-yl)ethyl]-N-phenylacetamide,

10/751,584

Response to Restriction Requirement mailed September 13, 2006

(4-Methylpyridin-2-yl)-[2-(1-phenethyl-piperidin-4-yl)-ethyl]amine and
(4,6-Dimethyl-pyridin-2-yl)-[2-(1-phenethylpiperidin-4-ylidene)-ethyl] amine.